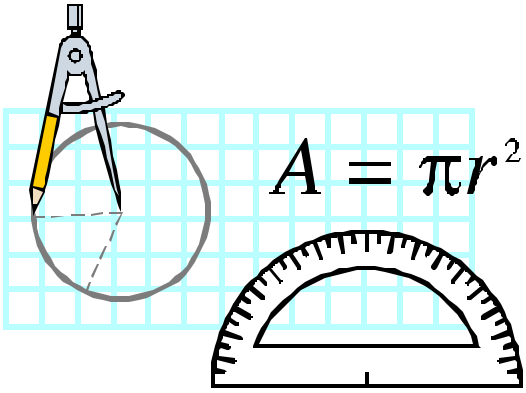

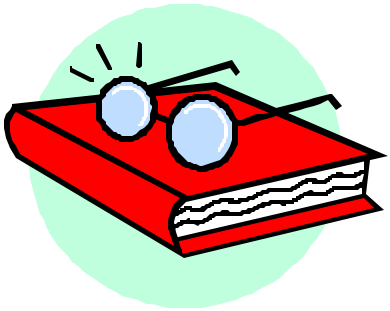

STATE BOARD OF EDUCATION
2001 MATHEMATICS ADOPTION REPORT

(FINAL Preprint Version)

JANUARY 2001

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INTRODUCTION

At its January 2001 meeting, the State Board of Education completed the 2001 Mathematics Adoption, adopting twelve instructional materials programs, and rejecting eleven. All actions were taken by unanimous vote of the full membership, and all were in keeping with the recommendations of the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

The 2001 Mathematics Adoption is a primary adoption of instructional materials for kindergarten and grades one through eight. The adopted programs are anticipated to remain available for purchase with restricted state funds (i.e., allocations received pursuant to the Schiff-Bustamante Standards-Based Instructional Materials Program and most of the annual allocations from the state Instructional Materials Fund) through June 30, 2007. One follow-up mathematics adoption (based upon the same evaluation criteria) is scheduled for 2003; any programs found to meet the evaluation criteria at that time will be added to the adoption list.

BACKGROUND

The 2001 Mathematics Adoption is an important event in California's major effort to improve student achievement in this core subject area. The effort can be traced back to the "Mathematics Program Advisory," adopted by the State Board in September 1996, which called for a mathematics program that balanced basic computational skills, problem solving, and conceptual understanding. During 1997, work was begun to revise the state's Mathematics Framework, guided by the program advisory and the Third International Mathematics and Science Study (TIMSS), which stressed the need for depth in mathematics instructional materials. The TIMSS study showed that in high achieving, industrialized nations, such as Japan, Singapore, and many European countries, all students took the equivalent of algebra at eighth grade. Many of the TIMSS findings were incorporated into the Framework.

At the same time that the framework was being developed, the mathematics content standards, the foundation for curriculum, were being prepared. The State Board adopted the *Mathematics Content Standards for California Public Schools, Kindergarten through Grade 12* in December 1997. The standards and framework together reflect a consensus on the mathematics California students need in order to compete in a global economy.

The 2001 Mathematics Adoption is the third in a series of four, core subject, primary instructional materials adoptions required by Assembly Bill 2519, Poochigian (Chapter 481, Statutes of 1998). AB 2519 specified that basic mathematics materials were to be adopted by March 2001, and that evaluation criteria for those materials were to be approved at least 18 months earlier. The State Board fulfilled its statutory obligations by approving the framework along with the evaluation criteria (Appendix A) in December 1998, and then adopting instructional materials twenty-five months later in January 2001. This timeline gave publishers seven additional months to develop materials that would reflect the standards and criteria.

The Curriculum Commission recommended and the State Board adopted only basic mathematics instructional materials, which are programs designed for use by students as the principal learning resource that meet in content and organization the basic requirements of the intended course. Supplemental materials (covering less than an entire course) were not considered within this adoption.

ADOPTION PROCESS

STATE BOARD PUBLIC HEARING AND ACTION

As noted above, the 2001 Mathematics Adoption culminated at the State Board's January 2001 meeting. In preparation for that meeting, the members of the State Board received a great deal of information concerning the mathematics instructional materials submissions, both orally and in writing, and had the opportunity to review the submissions personally. The State Board received a specific recommendation from the Curriculum Commission regarding each submission. The members of the Curriculum Commission, in turn, had reviewed the submissions personally, considered public testimony, and received advice from members of Content Review Panels and Instructional Materials Advisory Panels, as explained below.

Prior to taking action, the State Board held a public hearing at which 25 individuals addressed the recommendations of the Curriculum Commission and the merits of the submissions. Taking this vast amount of information and advice into account, the State Board chose to adopt and reject the instructional materials submissions in keeping with the Curriculum Commission's recommendations. Pursuant to Education Code section 60200(d), the State Board found that each instructional materials submission that was rejected did not adequately meet the criteria for adoption, taking into account the totality of the information received.

CRP/IMAP APPOINTMENT AND TRAINING

In preparing recommendations to transmit to the State Board, the members of the Curriculum Commission were assisted by a task force of individuals who composed Content Review Panels (CRPs) and Instructional Materials Advisory Panels (IMAPs). The members of the CRPs and IMAPs were appointed by the State Board with the advice of the Curriculum Commission in March 2000. The 2001 Mathematics Adoption of instructional materials was conducted according to applicable provisions of statute and regulation. The Curriculum Framework and Instructional Resources Division (CFIR) staff assisted the Curriculum Commission in its training of reviewers for the 2001 Mathematics Adoption. The eight IMAP teams were comprised of 54 members, including classroom teachers, school administrators, local board members, and parents (guardians). The four CRP teams were comprised of 15 mathematicians from both public and private institutions of higher education in California.

The IMAP and CRP members participated in a professional development training session to become familiar with the mathematics content standards, the framework, the evaluation criteria, and the adoption process. Susan Stickel, Chair of the Mathematics Subject Matter Committee of the Curriculum Commission, facilitated the training. The objective of the training was to ensure a reasonable degree of uniformity in the application of the evaluation criteria by the CRPs and IMAPs within the context of the full adoptions process, in which the work of these panels would be considered in conjunction with other information in determining whether the individual programs submitted by publishers satisfied or did not satisfy the criteria and applicable provisions of law. The training included formal presentations by publishers on each of the 23 submitted programs.

IMAP/CRP AND COMMISSIONER REVIEW

During the month of August, IMAP, CRP, and Curriculum Commission members received complete sets of instructional materials that were assigned to each panel to review and evaluate according to the criteria. Panelists and commissioners conducted their independent reviews of the materials in August, September

and October. The review process extended into November for members of the Curriculum Commission, as they considered the reports of the CRPs and IMAPs.

LEGAL AND SOCIAL COMPLIANCE REVIEW

All instructional materials are reviewed to ensure that they meet the standards contained in Education Code sections 60040-60045, 60048, 60200 and State Board policy as outlined in the *Standards for Evaluating Instructional Materials for Social Content.* The standards address such areas as the accurate portrayal of cultural and racial diversity, equitable and positive roles for males, females, disabled people, ethnic and cultural groups and the elderly. This was the first adoption to implement the provisions of AB 116, Mazzoni (Chapter 276, Statutes of 1999), that prohibits (with certain exceptions) the inclusion of commercial brand names, specific commercial product references, or corporate or company logos in adopted instructional materials.

Thirty-eight volunteers from around the state were selected to review the 23 math submissions. Eight programs received no citations, and fifteen programs received a total of 30 citations. For the most part, the affected publishers agreed to make minor modifications to their programs to resolve the citations. Two publishers appealed citations. One appeal was successful, and the other was eventually resolved by the publisher withdrawing the program element in which the cited material appeared.

CRP MEETING

In early-October 2000, the CRPs met to discuss and refine their preliminary report findings prior to meeting jointly with the IMAPs. The CRPs focused on factual accuracy and evaluation criteria related to *Mathematical Content/Alignment with Standards.* This meeting was open to the public, and publisher representatives attended, as did representatives of interested education organizations.

DELIBERATIONS

In mid-October 2000, the CRPs and IMAPs met in Sacramento for deliberations, with all members sharing the thoughts and impressions they had developed and the supporting evidence they had collected during their independent reviews of the materials. The IMAPs met in their assigned panels for most of a week, with (in almost all cases) a member of the Curriculum Commission acting as a group facilitator and with the staff of the Curriculum Frameworks and Instructional Resources Division (CFIR) assisting. Publishers were provided time to respond to formal questions developed by the IMAPs.

The deliberations process, training session, separate CRP meeting were all conducted in accordance with the *Bagley-Keene Open Meeting Act*. Various publisher representatives and interested members of the public attended the panel discussions. Every afternoon, deliberations would be stopped to provide an opportunity for public comment. There has been feedback that this process helped publishers to understand better the CRP and IMAP concerns with their submissions.

Several key points are worthy of note regarding the reports developed by the CRPs and IMAPs:

- Members of the CRPs and IMAPs at times disagreed with one another regarding specific points.

- Members of the CRPs and IMAPs – who served on a voluntary basis and who performed their individual reviews and deliberations in a limited amount of time – were instructed to be exemplary

not exhaustive in the citations of supporting evidence provided for their determinations and recommendations.

- The Curriculum Commission was the first level of review of the reports and recommendations of the CRPs and IMAPs at which the same individuals (i.e., the members of the Curriculum Commission) evaluated all of the mathematics submissions, not just some of the submissions (as was the case with the members of the CRPs and IMAPs).

- Curriculum Commission review is vital to ensure that the evaluation criteria and relevant provisions of law have been applied fairly and consistently across all of the submissions. In this instance, the Curriculum Commission departed from the CRPs and IMAPs (at least in part) on five of the 23 programs. In some cases, CRP members were not in complete agreement on individual submissions.

- The State Board of Education is the second and final level of review at which the same individuals (i.e., the members of the State Board) evaluate all of the submissions. In this instance, the State Board concurred with the recommendations of the Curriculum Commission, although authorizing staff (in consultation with a liaison from the Curriculum Commission and from the State Board) to make prepare the final report reflecting State Board actions.

EDITS MEETING

In November 2000, a meeting was held to review edits and corrections (not affecting program content). Publishers presented their edits as recommended by the CRPs and IMAPs. A memorandum memorializing the meeting and confirming agreements regarding edits and corrections was sent to each affected publisher. Subsequently, several publishers were informed of slight changes needed to comply with the provisions of statute, regulation, and State Board policy related to test preparation.

PUBLIC COMMENT AND REVIEW

Instructional materials submitted for adoption were displayed for public review and comment, beginning in August 2000, at 24 Learning Resources Display Centers (LRDCs) throughout the state (see Appendix B). The general public was given an opportunity to provide written comments through December 2000.

CURRICULUM COMMISSSION MEETING

In late-November 2000, the members of the Curriculum Commission reviewed the reports of the advisory panels; held two public hearings; and voted first in the Mathematics Subject Matter Committee, then as a full Commission to forward their final recommendations to the State Board. The Curriculum Commission's recommendations were presented to the State Board in December 2000 for information, then in January 2001 for action.

2001 Mathematics Adoption

[The State Board of Education adopted the Curriculum Commission's recommendations on January 10, 2001.]

These Programs Are Adopted

Publisher	Program Name	Grade Levels
CSL Associates, Inc.	Success with MathCoach	K-5
Harcourt School Publishers	Harcourt Math CA Edition [w/ Spanish as Alternate Format K-6]	K-6
Houghton Mifflin Company	Houghton Mifflin Mathematics, CA Edition	K-5
McDougal Littell Inc.	Concepts and Skills: Course 1 & 2 & Algebra 1	6-8
McDougal Littell Inc.	Structure and Method: Course 1& 2 & Algebra, Book1	6-8
McGraw-Hill School Division	McGraw-Hill Mathematics [w/ Spanish as Alternate Format K-6], CA Ed.	K-6
Prentice Hall, Inc.	Prentice Hall Pre-Algebra, CA Ed.	7
Prentice Hall, Inc.	Prentice Hall Algebra 1, CA Ed.	8
William H. Sadlier, Inc.	Progress in Mathematics, CA Ed.	K-6
Saxon Publishers, Inc.	Saxon Math K-3, An Incremental Development [w/ Spanish as Alternate Format K-3]	K-3
Saxon Publishers, Inc.	Math 54, 65, 76, and 87	3-6
Scott Foresman	Scott Foresman California Mathematics	K-6

These Programs Are Not Adopted

Publisher	Program Name	Grade Levels
Carnegie Learning, Inc.	Cognitive Tutor, Algebra 1	8
Everyday Learning Corporation	Everyday Mathematics, 2nd Ed.	K-3
Everyday Learning Corporation	Everyday Mathematics	4-6
Everyday Learning Corporation	Course 2 Impact Mathematics	7
Everyday Learning Corporation	Course 3 Impact Mathematics	8
Holt, Rinehart and Winston	Algebra Essentials and Applications	8
JRL Enterprises, Inc.	I Can Learn Mathematics	6
JRL Enterprises, Inc.	I Can Learn Algebra	8
Riverdeep, Inc.	Destination Math	7
Saxon Publishers, Inc.	Algebra 1/2 and Algebra 1	7-8
Wasatch Interactive Learning	Math Expeditions	K-5

If you need additional information, please contact the Curriculum Frameworks and Instructional Resources Division at (916) 657-3023.

SPECIAL ISSUES

CALIFORNIA'S MATHEMATICS STANDARDS, FRAMEWORK, AND CRITERIA

Assembly Bill 265, Alpert (Chapter 975, Statutes of 1995), required the development and adoption of rigorous academic content and performance standards for the core subject matter areas of reading/language arts, mathematics, history-social science, and science. Subsequently, Senate Bill 430, Greene (Chapter 69, Statutes of 1996), called on the State Board to modify the curriculum frameworks (as appropriate) to bring them into alignment with the content standards.

Assembly Bill 2519, Poochigian (Chapter 481, Statutes of 1998), established a specific schedule for the adoption of standards-aligned instructional materials: history-social science (1999), science (2000), mathematics (2001), and reading/language arts (2002). Typically, the State Board commences an adoption by approving evaluation criteria 30 months prior to the adoption. On a one-time basis, AB 2519 shortened that time line, specifying (in the case of mathematics) that the evaluation criteria be approved at least 18 months prior to the adoption.

The 2001 Mathematics Adoption is based on the standards-aligned *Mathematics Framework* and evaluation criteria that were adopted by the State Board in December 1998. Thus, local education agencies can be confident that the adopted mathematics materials fully support the teaching and learning of grade-level content as specified in the content standards. This is the first post-AB 2519 adoption of instructional materials that has incorporated a standards-based curriculum framework.

CHANGES IN THE CURRICULUM

The standards-based curriculum has enhanced mathematics content and made the courses more rigorous, particularly above the primary grades. In the past, for example, students in grade seven have generally just reviewed mathematics content covered in grades four through six; now, grade seven students are expected to receive pre-algebra content. Algebra (or the beginning of a higher-order integrated mathematics course series) is now the benchmark for students in grade eight, consistent with the TIMSS Report findings, the *Mathematics Framework,* and the content standards. The more rigorous content specified in the standards has required publishers to focus on the development of materials that present a balance of basic computational skills, problem solving, and conceptual understanding and that emphasize mathematical reasoning. These important changes have resulted in mathematics materials that are more challenging and that better prepare students for the higher education and careers.

TRANSITIONAL MATERIALS

Bringing the achievement of all students to the levels envisioned in the content standards will be challenging. In the past, some students were not given full opportunities to learn the richness of mathematics, gain full competency in basic skills, understand mathematical reasoning, or actively practice problem solving. With that in mind, the evaluation criteria outlined specifications for optional transitional materials. These materials are specifically designed to help lower achieving students reach the levels of proficiency required in the content standards. Though not required for adoption, some publishers prepared and included transitional materials. Districts and schools facing particular transitional challenges may want to look closely as programs that include such materials.

ASSESSMENT AND TEST PREPARTION MATERIALS

In order to comply with Education Code Section 60611* , the State Board adopted a regulation related to test preparation and the "Policy on Preparation for State Tests and the Standardized Testing and Reporting (STAR) Program." The Curriculum Commission took action at their September 2000 meeting to support the law and State Board policy. Any references to specific standardized tests in the mathematics submissions were handled through the "corrections and edits" process. Staff from the Department's Standards and Assessment Division reviewed all submissions and forwarded their reports and recommendations to affected publishers, the Curriculum Commission, and the State Board. The State Board took action in December 2000, based on the Standards and Assessment Division staff review, to require that six of the 23 submissions be modified as necessary to resolve conflicts with the requirements of law and State Board policy.

[* "No city, county, city and county, or district superintendent of schools or principal or teacher of any elementary or secondary school shall carry on any program of specific preparation of the pupils for the statewide pupil assessment program or a pupil assessment program or a particular test used therein."]

ACCURACY ISSUES

All factual errors identified in the evaluation process were corrected prior to the adoption of instructional materials by the State Board. Should any factual errors be identified in adopted instructional materials, the State Board directs that publishers take immediate steps to correct the errors and, as appropriate, to advise local education agencies that have already received the materials.

Toward the objective of factual accuracy in adopted instructional materials, the State Board and the Curriculum Commission express their particular appreciation to the mathematicians from the University of California, Stanford University, the California State University, and the University of San Diego who so generously donated their time and expertise between August and October 2000. They made important contributions in pinpointing factual errors directly and assisting, advising, and supporting the work of the IMAPs to ensure that the mathematics content of adopted program is honest, accurate, and precise.

Pursuant to Education Code Section 60200(c)(3), materials must be "factually accurate and incorporate principles of instruction reflective of current and confirmed research."

The State Board of Education, the Curriculum Commission, and the Department of Education all share the same goal of ensuring that local education agencies have accurate, up-to-date, comprehensive instructional materials.

REVIEW OF THE CONSISTENCY OF THE ADOPTION WITH THE MATHEMATICS FRAMEWORK PURSUANT TO EDUCATION CODE SECTION 60200(E)

Fewer than five basic instructional materials programs in mathematics were recommended to and adopted by the State Board of Education for grades seven and eight, even though at least five programs had been submitted for these grade levels. In this circumstance, Education Code 60200(e) provides that the State Board "conduct a review of the degree to which the criteria and procedures used to evaluate the submitted materials for the adoption were consistent with the state board's adopted curriculum framework."

On the State Board's behalf, the Curriculum Development and Supplemental Materials Commission and California Department of Education staff conducted the review required by Education Code section 60200(e). The review concluded:

(1) The evaluation criteria were based on the mathematics content standards and the standards-aligned *Mathematics Framework* as adopted by the State Board.

(2) The criteria and procedures used to evaluate the submitted materials for this adoption were entirely consistent with the content standards and the *Mathematics Framework*.

(3) It was the very consistency of the evaluation criteria with the content standards and *Mathematics Framework* that resulted in fewer than five basic instructional programs in mathematics being recommended for adoption (and subsequently adopted) for grades seven and eight.

(4) Overall, the rejected programs failed to meet the evaluation criteria, although positive comments were made about some aspects of them in the review process.

(5) In the review process, the evaluation criteria were applied fairly and consistently.

In keeping with Education Code section 60200(e), the State Board took formal action to accept the review regarding the consistency of the 2001 Mathematics Adoption with the *Mathematics Framework*.

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Marilyn Astore, Chair, Curriculum Commission, 1999-2000
Assistant Superintendent, Sacramento County Office of Education

Susan Stickel, Chair, Mathematics Subject Matter Committee, 1999-2000
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Criteria for Evaluating Mathematics Instructional Resources Adopted by the State Board of Education December 1998

Introduction

Instructional materials adopted by the state must help teachers present the content set forth in the *Mathematics Content Standards.* To accomplish this purpose, this document establishes the criteria for evaluating the instructional materials. These criteria serve as evaluation guidelines for the statewide adoption of mathematics instructional materials in kindergarten through grade eight for the 2001 Adoption of Mathematics Instructional Resources.

The California mathematics standards are challenging. In the initial years of implementing the *Mathematics Framework,* a major goal for most school districts across the state will be to facilitate the transition from what students actually know to what the *Mathematics Content Standards* envision they should know. Instructional materials play a central role in facilitating this transition.

Publishers are encouraged to design instructional materials specifically for use during this transition period. Materials that will help districts meet this challenge will clearly identify the highest-priority instructional activities and will allow teachers to focus instruction in those areas as necessary. During this transition school districts may need to allocate more time to mathematics instruction than they will in subsequent years.

Instructional materials adopted by the State Board of Education, on the whole, should provide programs that will be effective for all students-those who have not mastered most of the content taught in the earlier grades and those who have. In addition, some instructional materials must specifically address the needs of teachers who instruct a diverse student population. Therefore, the *Mathematics Framework* does not ask publishers to use a particular pedagogical approach; instead, it encourages them to select research-based pedagogical approaches that collectively give teachers alternatives that will help them in teaching mathematics effectively.

Evaluation Criteria

The criteria for evaluation of K-8 mathematics instructional resources are organized into five general categories, followed by a section on suggestions for optional criteria for publishers who choose to develop transitional materials (transitional materials will be considered as part of the Universal Access criterion):

1. *Mathematical content/alignment with the standards.* The content as specified in the *Mathematics Content Standards* and elaborated on in the framework
2. *Program organization.* The sequence and organization of the mathematics program that provides structure to what students should learn each year
3. *Assessment.* The strategies presented in the instructional materials for measuring what students know and are able to do
4. *Universal access.* The information and ideas that address the needs of special student populations, including students eligible for special education, students whose English-language proficiency is significantly lower than that typical of their class or grade-level, students whose achievement is either significantly below or above that typical of their class or grade level, and students who are at risk of failing mathematics
5. *Instructional planning and support. I*nformation and materials, typically including a separate edition specifically designed for use by the teacher, that help teachers in implementing the mathematics program

Mathematics Content/Alignment with the Standards

Mathematics materials should support teaching to the mathematics content standards. In kindergarten through grade seven, the standards are organized in five strands: Number Sense; Algebra and Functions; Measurement and Geometry; Statistics, Data Analysis, and Probability; and Mathematical Reasoning. However, there is no requirement that publishers adhere to this strand organization as long as they address all the individual standards. In grades eight through twelve, the standards are organized by discipline. Some schools teach the grade eight through twelve mathematics curriculum in traditional courses, and others teach it in an integrated fashion.[1] To provide local educational agencies and teachers with flexibility in presenting the material, the standards for grades eight through twelve do not mandate that a particular discipline be initiated and completed in a single grade. Nevertheless, however mathematics is taught, the core content of these subjects must be covered; and all academic standards for achievement must be the same.

Materials that fail to provide thorough instruction on the standards and the mathematics content described in the framework will not be considered for adoption.

Materials aligned with the mathematics content standards must satisfy the following criteria:

- The content supports teaching the mathematics standards at each grade level (as detailed, discussed, and prioritized in Chapters 2 and 3 of the framework).
- A checklist of evidence accompanies the submission and includes page numbers or other references and demonstrates alignment with the mathematics content standards and, to the extent possible, the framework.
- Mathematical terms are defined and used appropriately, precisely, and accurately.
- Concepts and procedures are explained and are accompanied by examples, to reinforce the lessons.
- Opportunities for both mental and written calculations are provided.
- Many types of problems are provided: those that help develop a concept, those that provide practice in learning a skill, those that apply previously learned concepts and skills to new situations, those that are mathematically interesting and challenging, and those that require proofs.
- Ample practice is provided with both routine calculations and more involved multistep procedures in order to foster the automatic use of these procedures and to foster the development of mathematical understanding, which is described in Chapters 1 and 4.
- Applications of mathematics are given when appropriate, both within mathematics and to problems arising from daily life. Applications must not dictate the scope and sequence of the mathematics program and the use of brand names and logos should be avoided. When the mathematics is understood, one can teach students how to apply it.
- Selected solved examples and strategies for solving various classes of problems are provided.
- Materials must be written for individual study as well as for classroom instruction and for practice outside the classroom.
- Mathematical discussions are brought to closure. Discussion of a mathematical concept, once initiated, should be completed.
- All formulas and theorems appropriate for the grade level should be proved, and reasons should be given when an important proof is not proved.
- Topics cover broad levels of difficulty. Materials must address mathematical content from the standards well beyond a minimal level of competence.

[1] *Note:* If a publisher submits an integrated program for grade eight, the entire program series must be submitted (e.g., to evaluate a 3-year integrated algebra I/geometry/algebra II series, materials for all 3 years of the program would be reviewed to determine alignment with the algebra I standards).

- Attention and emphasis differ across the standards in accordance with (1) the emphasis given to standards in Chapter 3 and (2) the inherent complexity and difficulty of a given standard.
- Optional activities, advanced problems, discretionary activities, enrichment activities, and supplemental activities or examples are clearly identified and are easily accessible to teachers and students alike.
- A substantial majority of the material relates directly to the mathematics standards for each grade level, although standards from earlier grades may be reinforced. The foundation for the mastery of later standards should be built at each grade level.
- An overwhelming majority of the submission is devoted directly to mathematics. Extraneous topics that are not tied to meeting or exceeding the standards, or to the goals of the framework, are kept to a minimum; and extraneous material is not in conflict with the standards. Any nonmathematical content must be clearly relevant to mathematics. Mathematical content can include applications, worked problems, problem sets, and line drawings that represent and clarify the process of abstraction.
- Factually accurate material is provided.
- Principles of instruction are reflective of current and confirmed research.
- Materials drawn from other subject-matter areas are scholarly and accurate in relation to that other subject-matter area. For example, if a mathematics program includes an example related to science, the scientific references must be scholarly and accurate.
- Regular opportunities are provided for students to demonstrate mathematical reasoning. Such demonstrations may take a variety of forms, but they should always focus on logical reasoning, such as showing steps in calculations or giving oral and written explanations of how to solve a particular problem.
- Homework assignments are provided-beyond grade three (they are optional prior to grade three).

Program Organization

The sequence and organization of the mathematics program provide structure to what students should learn each year, and allow teachers to convey the mathematics content efficiently and effectively. The program content is organized and presented in a manner consistent with achieving the goals of the mathematics content standards. The essential components for program organization are listed as follows:

- Concepts are developed in logical order and increase in depth and complexity during each school year and from grade to grade. Materials for each grade are organized around a few key topics, as described in Chapter 3 of the framework. Although some repetition in the form of review is necessary, review must be for developing automaticity or preparing for further learning. Content for a grade level must not be diluted by an extensive review of skills that have been covered earlier. Substantial new material needs to be introduced at successive levels.
- The order of presentation of mathematical topics is mathematically and pedagogically sound.
- Prerequisite skills and ideas are presented before the more complex topics that depend on them.
- Coverage starts with easy cases and proceeds, step-by-step, to increasingly complex problems within the topic areas.
- The connections between related topics are taught when it is appropriate, and the organization of the material supports the understanding of these connections. Mathematical content and instructional activities are sequenced to prevent common student misconceptions (see Chapter 3). Topics that students are likely to confuse are not introduced together; but similarities and differences in ideas and procedures are eventually addressed.
- Student materials ensure that students can look back in the textbook for help with understanding a topic; compilations, such as indices, tables of contents, and review summaries, also provide assistance.

- Materials include tables of contents, indices, and glossaries containing important mathematical terms used in the book to make it easier for parents or others to tutor students. The framework encourages any features of instructional materials that enable older sibling, parental, or other adult tutoring.
- The scope and sequence are referenced in such a way that "looking back and forward" can include previous and subsequent grade levels in the series.
- Materials include an overview of chapters that students are expected to learn with the mathematical concepts involved clearly identified. This material should be available to students, parents, and teachers.
- Problems and exercises based on the students' prior and current experience with the mathematics curriculum are accessible to students.
- Materials are designed so that if students should have trouble with a particular type of problem, guidance is provided to the teachers to help them identify the reason for the difficulty (e.g., identify component skills not mastered), and specific remedies should be suggested.
- Support materials, such as computer programs and manipulatives, are clearly aligned with the mathematical and instructional goals of the mathematics content standards and the framework.
- Applications of the mathematics under discussion must be clearly marked as such and must not be equated with the mathematics itself.
- Materials introduce new concepts at a reasonable pace and provide sufficient instructional and practice material on all the important topics.
- Standards-based goals are explicitly and clearly associated with instruction and assessment.
- Computational and procedural skills, conceptual understanding, and problem solving are interconnected and included throughout the program.

Assessment

Instructional materials should contain strategies and tools for continually measuring student achievement with a reasonable degree of accuracy. Assessments will measure what students know and how well they know it. In keeping with the issues discussed in Chapter 5 of the *Mathematics Framework*, instructional materials must provide teachers with a variety of assessment measures and procedures for different purposes. Assessment programs should include elements of conceptual understanding, basic and procedural skills, and problem solving.

Instructional materials should include:

- Assessments that have content validity and measure individual student progress at regular intervals, that measure each student's entry-level skills and knowledge, that monitor student progress toward meeting the standards, that evaluate mastery of grade level standards, and that provide summative evaluations of individual student achievement
- Assessments for identifying students who are not making reasonable progress toward achieving the standards
- Opportunities to assess student reasoning across the grades as it progresses from informal explanation to formal proofs
- Measurement of conceptual understanding, basic skills and procedures, and problem solving

Instructional materials should provide a variety of assessment measures and procedures for different purposes, including:

- Assessments that are appropriate for different grade levels so that students can check their own work frequently while learning the material and after completing a chapter or unit
- Assessment of appropriate duration at various intervals (e.g., every day at the end of a lesson or chapter, and at intervals of no more than six weeks)

- Research-based assessments that have content validity
- Both curriculum-embedded assessment and summative assessment
- Multiple methods of assessing what students know and are able to do

Instructional materials must guide the teacher in assessing the student's level at the beginning of the school year. The initial assessment should be comprehensive and help the teacher in determining whether the student should work with the grade-level materials, the materials for the previous grade level, or the transitional materials that teach concepts and skills that should have been previously mastered.

Instructional materials should help teachers use assessment data in instructional planning and reporting, such as:

- Suggestions based on assessment data about ways in which to modify an instructional program so that all students are constantly progressing toward meeting or exceeding the standards
- Suggestions about the type of assessment data to be used to guide decisions about instructional practices
- Suggestions for keeping parents and students informed about student progress

Universal Access [2]

Instructional materials need to provide access to the standards-based curriculum for students with special needs. Programs must conform to the. policies of the California State Board of Education and to other applicable state and federal requirements with respect to diverse populations and students with special needs, as discussed in the "Universal Access" chapter of the *Mathematics Framework.*

Materials supporting universal access include:

- Strategies to help the teacher provide access to mathematics for all students with regard to ability, language proficiency, and other special needs.[3]
- A description of methods by which special needs students can experience success with and appreciation of mathematics, from the simplest skills to the most complex understanding.
- Help for teachers to offer the program to students with a wide range of achievement levels, making suggestions for compacting or expanding the curriculum and grouping within or across grade levels.
- Help for students who are below grade level, including more explicit explanations, review, practice, guidance, or other assistance (These students will need extra time and instructional materials devoted to mathematics. It is also important that accommodations for special needs or other low-performing students provide opportunities for them to learn the key concepts in mathematics and not relegate struggling students to meaningless tasks.)
- Alternatives for gifted and talented students that are thoughtful and well conceived and that allow students to accelerate beyond their grade-level content (acceleration) or to study the content in the *Mathematics Content Standards* in greater depth or complexity (enrichment).
- Information about how teachers might use the results of assessment to differentiate curriculum and instruction at the appropriate level of challenge for all students.
- Suggestions to help teachers preteach and reinforce mathematics vocabulary and concepts with English learners.

[2] *Note:* Also refer to "Special Consideration: Support for Teachers During the Transition Period" for additional guidance as part of the Universal Access criterion.

[3] *Note:* The California *Education Code* provides for adopted instructional materials to be translated into braille and large print by the Clearinghouse for Specialized Media and Technology. The Clearinghouse also converts materials into tape and video format as appropriate. Providing student text in digital format (although not required) makes conversion easier.

- Suggestions to teachers on how and when to modify assessment or instruction for special education pupils.

Instructional Planning and Support

Materials that provide support for teachers need to be built into the program. These materials should contain specific suggestions and illustrative examples of how the teacher can implement a standards-based mathematics program. Instructional materials should meet the following criteria:

- All components of the program are provided so that there is little or no need for teachers to identify, gather, or develop supplementary materials.
- Clear grade-appropriate explanations of mathematical concepts appear in a form that . teachers can easily adapt for classroom presentation.
- (Optional) Teacher resources contain full, adult-level explanations and examples of the more advanced mathematics topics that relate to the lesson so that teachers can assess and improve their own knowledge of the subject as necessary. (East Asian lesson plans offer excellent examples showing how this can be done; see Appendix B of the *Mathematics Framework.)*
- Teacher resources contain discussions of the role of the specific grade-level mathematics in relation to the total kindergarten through grade twelve mathematics curriculum and beyond, describing both what has been previously taught and why and what will be taught in succeeding grades.
- Different kinds of lessons and alternative ways in which to explain concepts are provided to offer teachers choice and flexibility in developing their programs.
- Any required manipulatives are provided, or inexpensive alternatives are suggested.
- Manipulatives should promote student learning, and clear instructions for their efficient use are provided.
- Teacher materials contain sample lesson plans and suggestions for organizing and managing the classroom.
- Tools for assessing student progress and knowledge and suggestions for how to use the assessment data for instructional planning are provided.
- A system is provided for accelerating or decelerating the rate at which new material is introduced to students, in accordance with students' ability to assimilate new material.
- Review and practice distributed over time, as described in Chapter 4 of the *Mathematics Framework;* is provided to enhance understanding and promote generalization and transfer of skill and knowledge.
- Any instructional software and technological tools used as a format for presentation of the instructional materials are an integral part of the submission.

Special Consideration: Support for Teachers During the Transition Period

(Additional criteria to be considered as part of the Universal Access criterion)

The California mathematics standards aim at a level considerably above that which many students had achieved when the 1999 *Mathematics Framework* was written. Helping students make the transition to the levels of the standards requires a major effort. During the first two or three years of transition, or perhaps longer, a sixth grade teacher, for example, will most likely use an instructional program aimed at helping many students whose performance level falls far short of the grade-level standards to catch up. In subsequent years, that teacher may need to use *the same instructional* program to maintain and expand on the grade-level performance for students who enter the sixth grade already performing at grade level.

Instructional materials should provide a program that will be effective for all students-those who have not mastered most of the content taught in the earlier grades and those who have. Some students may have weaknesses in several areas of content from the earlier grades. This material can be taught within the context of the grade-level textbook. Other students may have such severe problems that it would be unrealistic to assume that the deficits could be remediated with the grade-level textbook.

The hope is that some publishers will directly address the need for transitional materials designed to help students reach the levels of proficiency required in the *Mathematics Content Standards.* Such transitional materials may be designed for a two-hour block of mathematics instructional time per day, a summer or "off-track" program, or an after-school-tutoring program of up to one hour per day. Those publishers should provide transitional materials with content related to the standards, techniques for assessment, and support for teachers. Those topics are discussed in the next sections.

Content Related to the Standards for Transitional Materials

A standards map should be provided, showing which standards are addressed and when, with the understanding that the transition materials include standards from several grade levels in a single student or teacher edition. Publishers may consider including transition materials designed to teach the essential content from earlier grades along with the standards for a given grade.

Assessment Tools for Transitional Materials

Assessment materials should be provided to help the teacher determine the student's level of achievement relative to the standards at the beginning of the school year. The initial assessment should be comprehensive so that the teacher can determine which textbook would be appropriate for the student:

- The grade-level textbook
- The grade-level textbook for a previous grade
- Special transitional materials that teach concepts and skills that should have been mastered earlier

Teacher Support for Transitional Materials

Suggestions for teaching students lacking knowledge of certain content cannot be simple afterthoughts to the grade-level material. To develop appropriate instructional plans for these students, teachers need a master guide that enables them to identify foundational skills and associated instructional units taught at earlier grade levels. Materials for students functioning below their grade levels must be designed to accelerate the students' acquisition of critical concepts, procedures, and skills. Another consideration in the development of these materials is that more than one hour a day of instructional time may be devoted to mathematics for students in grades four through twelve who are not performing at grade level. Instructional programs should provide teachers with instructional activities for use during any additionally allocated instructional time. Placement tests and suggestions for instructional strategies should be included to help students whose facility with mathematics enables them to move through the program at an accelerated pace.

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Publisher: **Carnegie Learning, Inc.**
Title of Program: **Cognitive Tutor, Algebra 1**
Grade Level: **8**

Components

Cognitive Tutor, Algebra 1 includes a teacher edition, student edition with assignments and assessments, software guide, consumable student text, and consumable student assignments. The student materials are available in both English and Spanish. A site license is available which includes the software. The software is a required component of the program.

Summary

The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards

The program insufficiently addresses the content standards and applicable evaluation criteria to be recommended for adoption. Concepts and procedures are seldom explained and are rarely accompanied by examples to reinforce the lessons.

Program Organization

The program is not organized and presented in a manner consistent with achieving the goals of standards-based mathematics instruction. It has no index, glossary, chapter review, or key terms, and would be difficult to use for individual study. Teacher assistance is limited to margin notes in the teacher edition. There is no evidence in the teacher or student editions how the software correlates with the text. The order in which topics are presented seems relatively random, and connections between related topics are rarely made.

Assessment

The program does not contain adequate strategies for student assessment. It provides no guidance on how to use the assessment components to inform or modify instruction.

Universal Access

The program does not provide access for students with special needs. It lacks guidance on how to differentiate instruction.

Instructional Planning and Support

The program is very difficult for the teacher to use. It does not contain specific suggestions and illustrative examples of how the teacher can implement a standards-based mathematics program.

Other Comments

The publisher recommends using the software component forty percent of the time, but the software has many bugs, glitches, and typographical oddities.

Publisher: **CSL Associates, Inc.**
Title of Program: **Success with MathCoach**
Grade Level: **K-5**

Components
Success with MathCoach consists of a teacher edition and student edition, *Home Reference and Homework Resource Book*, and an *Intervention Library*. An *Interactive Big Book* for instruction and informal assessment is included at kindergarten. Grades 1-5 also have *Daily Oral Math* black line masters, *Standards-Based Assessment* with black line masters, *Standards-Based Assessment Annotated with Answer Key*, *Periodic Assessment Workbook*, and an *Assessment Teacher Guide*. Additional resources include a teacher guide for *Ten-Frame Models*, a *Student's Tool Box* with a list of manipulatives, and a *Teacher's Tool Box*, also with a list of manipulatives.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Content Review Panel (CRP) and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program meets the mathematics content/alignment with standards criteria sufficiently to be acceptable for adoption. Mathematical terms are defined and used appropriately, although terms could be clearer in some places. Sufficient practice opportunities are provided for students' written calculations, and opportunities are provided for both routine calculations and multi-step procedures. The material is written for individual study as well as classroom instruction.

Program Organization
The program meets the criteria for program organization sufficiently to be acceptable for adoption. Although sequencing and pacing of topics could be improved, mathematical concepts are usually sequenced from the simple to the complex within the grade-level program. There are multiple opportunities for students to learn computational and procedural skills.

Assessment
The program satisfactorily meets the criteria for assessment. It has a sufficient variety of assessments and sufficient teacher guidance, and it provides a report card for keeping parents and students informed regarding student progress towards meeting the content standards.

Universal Access
The program meets the criteria for universal access sufficiently to be acceptable for adoption. Three universal access suggestions are provided within each lesson for teaching the content.

Instructional Planning and Support
The program meets the criteria for instructional planning and support sufficiently to be acceptable for adoption. General background and contextual explanations are found at the beginning of each chapter, but these explanations could have been strengthened with better-developed discussion of the role of the specific grade level mathematics in relation to the total curriculum (K-12). In order to adapt the lessons to ensure that students achieve deeper mathematical understanding, the teacher needs to have a strong mathematical background.

Publisher: **Everyday Learning**
Title of Program: **Everyday Mathematics**
Grade Level: **K-3**

Components
Everyday Mathematics includes teacher packages containing teacher manuals, student materials, operations (algorithms) handbooks (grade 3), assessment guides, black line masters (grades 1-3), home-school connection books, and a content review poster. Student materials include activity worksheets (K), lesson-specific activity pages in student journal form (grades 1-3), and hardcover student reference text (grade 3). The program also includes extra practice sets with teacher guides (grades 1-3), and take-home activities (K-3). Manipulative kits are available for each grade.

Summary
The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program does not meet the evaluation criteria for mathematics content/alignment with standards. The program fails to cover the "emphasis standards" identified in the framework (as required by the evaluation criteria), particularly in grades two and three.

Program Organization
The program does not meet the evaluation criteria for program organization.

Assessment
The program does not meet the evaluation criteria for assessment. The kindergarten program includes a very complete diagnostic assessment, but there is no initial, beginning-of-the-year assessment in grades one through three. There are three main assessment components: On-going, Product, and Periodic. On-going assessments include the use of observation of children as they work. Product assessment includes samples of daily written work and portfolio ideas. Periodic assessments include one unit review and assessment for each unit and one assessment at the end of the year.

Universal Access
The program does not meet the evaluation criteria for universal access. Instructional strategies that address the unique needs of special education students and English learners are limited and not readily recognizable.

Instructional Planning and Support
The program does not meet the evaluation criteria for instructional planning and support. A unit organizer provides a system for accelerating or decelerating the rate at which new material is introduced to students. However, a clearer pacing chart is needed. The planning needed is quite teacher-intensive.

Publisher: **Everyday Learning**
Title of Program: **Everyday Mathematics**
Grade Level: **4–6**

Components
Everyday Mathematics consists of: *Teacher's Manual and Lesson Guides*, student *Journals, Towards a Balanced Assessment*, *Resource Book*, *Creating Home & School Partnerships, Video Data* videotape (grade 5), *Operations Handbook*, *A World Tour Guidebook* (grade 4), *American Tour Almanac* (grade 5), *Student Reference Book* (versions for grade 4 and grades 5/6), *Skills Links*, *Everyday Mathematics Sourcebook*, and manipulative kits.

Summary
The State Board of Education rejected this program because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP) and the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program does not address all of the content standards to the depth and extent required by the evaluation criteria and often addresses or emphasizes only parts of the standards. In some cases, concepts and procedures are not well-explained or rely heavily on the teacher's own content knowledge and understanding, resulting in a lack of closure to the mathematical discussion.

Program Organization
The program is not adequately organized and presented for efficient and effective use by the teacher to convey the subject matter content. Teachers, parents (guardians), and students cannot reference standards-based goals, especially as they relate to instruction and assessment. The goals are not clearly referenced in the tables of contents, indices, and glossaries.

Assessment
The program does not meet the evaluation criteria for assessment satisfactorily. Assessment instruments are often inefficient and ineffective. Comprehensive beginning-of-the-year assessments are not available to help the teacher guide and modify instructional planning.

Universal Access
The program does not directly identify or address the universal access criteria. Some strategies to help the teacher provide access to mathematics for all students is embedded within the program. However, the program lacks specific help, alternative strategies, and materials for working with students who (1) are above or below grade level, (2) have limited English proficiency, or (3) have other special needs.

Instructional Planning and Support
Navigating the program's many components in order to access specific teaching resources is difficult. The program lacks the necessary materials to meet the needs of low-performing students and students struggling with reading, and, therefore, requires the teacher to identify, gather, modify, and develop supplementary materials. There are only limited suggestions for organizing and managing the classroom. Insufficient tools are available for using assessment data to accelerate and decelerate instruction.

Publisher: **Everyday Learning Corp.**
Title of Program: **Course 2 Impact Mathematics**
Grade Level: **7**

Components

Course 2 Impact Mathematics includes a student edition and a teacher package containing teacher manuals, assessment guides, teaching masters, and implementation guide. A manipulative kit for use with the program is also available.

Summary

The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards

A number of standards are either not covered or are inadequately covered. There are few opportunities for mental and written calculations. Not all mathematical terms are defined precisely and accurately. The program lacks adequate practice for students to learn procedural skills.

Program Organization

The program does not meet the criteria for program organization. The glossary is limited. Without example problems in the lessons, it is difficult for a student to look in the textbook for help in understanding a topic. The investigations without procedural examples make it difficult for a parent (guardian) to assist with tutoring.

Assessment

Insufficient guidance is provided for using the program's many assessment pieces in instructional planning. Suggestions for keeping parents (guardians) and students informed about student progress are not provided.

Universal Access

The program does not provide access for students with special needs. Assistance for students who are below grade level is inadequate. Suggestions to help teachers pre-teach and reinforce mathematics vocabulary and concepts with English learners are not evident.

Instructional Planning and Support

The program is difficult for teachers to use. A teacher would need to find supplemental material to cover standards that are either missing or not covered in depth. No system is provided for accelerating or decelerating the rate at which new material is introduced to students. The program does not contain adequate teacher support materials with specific or extensive suggestions and examples of how teachers can implement a standards-based mathematics program.

Publisher: **Everyday Learning Corp.**
Title of Program: **Course 3 Impact Mathematics**
Grade Level: **8**

Components

Course 3 Impact Mathematics includes a student edition and teacher packages containing teacher manuals, assessment tools, and teaching masters. A manipulative kit for use with the program is also available.

Summary

The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards

A number of the standards are inadequately covered. The program does not support teaching and learning the skills and knowledge called for in the Algebra I content standards. Although the program is interesting and engaging, the lack of alignment to standards is a critical flaw.

Program Organization

The program is organized in a logical manner. Prerequisite skills and ideas are presented before more complex topics. Computational and procedural skills, conceptual understanding, and problem solving are interconnected and included throughout the program. However, the student is given little opportunity to practice symbolic manipulation.

Assessment

Assessments measure individual student progress at regular intervals. Assessment checklists are provided for each unit that outline objectives taught, but the objectives are not cross-referenced to standards.

Universal Access

The program provides only limited access to the standards-based curriculum for all students. Although it thoroughly develops concepts with a variety of activities to assist students in acquiring understanding, the program provides only a limited description of methods by which the teacher can re-teach or otherwise assist special needs students.

Instructional Planning and Support

The program does not contain adequate teacher support materials with specific suggestions and examples of how teachers can implement a standards-based mathematics program. No instructional software or technological tools are provided.

Special Consideration: Support for Teachers During the Transition Period

Course 2 Impact Mathematics is included as transition material designed to teach the essential content from earlier grades. However, resources and documentation for using *Course 2* as a transitional material are absent.

Publisher: **Harcourt School Publishers**
Title of Program: **Harcourt Math 2002**
Grade Level: **K-6**

Components
Harcourt Math 2002, available in English and Spanish, includes teacher editions, student editions (K-6), Big Book (K), practice, reteaching, problem solving and challenge workbooks, teaching resources, assessment guides, daily and teaching transparencies, English learner materials, family involvement activities and games, math readers (K-2), and math literature big books, math little books and cassettes (K). There are electronic and print intervention materials, math news videos, and CD-ROMs for math concept practice, assessment and intervention. Manipulative kits are also available.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
Overall, the program's content supports teaching the mathematics standards at each grade level. Concepts and procedures are explained and accompanied by examples to reinforce lessons, and many opportunities for both mental and written calculations are provided.

Program Organization
The order and presentation of concepts is mathematically sound and every lesson is clearly and explicitly tied to specific state standards. Also notable is the exemplary software program included for each grade level. Additional guidance (e.g., a pacing overview) would be helpful.

Assessment
The assessment component is very strong throughout the program. Many strategies are available for teachers to monitor student progress on an ongoing basis.

Universal Access
The program provides access to the standards-based curriculum for students with special needs. The teacher editions consistently provide ideas and guidance in this regard.

Instructional Planning and Support
All necessary components of this program are provided. A four-part lesson format is used throughout in which each skill or concept is introduced, taught, practiced, and assessed. With many supplemental materials at their disposal, teachers can follow each lesson with extra practice, reteaching, or enrichment, but managing all these extensive resources may be challenging.

Special Consideration: Support for Teachers During the Transition Period
The program (1) includes inventory tests intended to help teachers determine students' levels of achievement relative to the standards at the beginning of the school year and (2) supports teachers with skills instruction and alternative teaching strategies to help prepare students to work successfully on grade-level content.

Publisher: **Holt, Rinehart & Winston**
Title of Program: **Algebra Essentials and Applications**
Grade Level: **8**

Components
Algebra Essentials and Applications consists of a student text, a teacher edition and a planning guide. Ancillary components include a number sense booklet for parents and students, a professional development guide for teaching algebra in the middle grades, assessment resources, and two additional technology components.

Summary
The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
A number of standards are inadequately covered. Formulas and theorems appropriate for Algebra 1 are not proved. The program also contains some factually inaccurate material. Practice to foster the automatic use of procedures is insufficient. Teachers must supplement what is provided in the program with substantial additional material.

Program Organization
The content is organized and presented in a manner consistent with providing students an opportunity to achieve the essential knowledge and skills described in the standards. However, minimal practice problems are provided to reinforce conceptual understanding.

Assessment
The teacher is given excellent guidance in the use, administering, scoring, and interpreting of the assessments provided in the program. Conceptual understanding, basic skills and procedures, and problem solving are assessed on an ongoing basis with chapter tests.

Universal Access
Limited guidance is presented to help the teacher provide access to mathematics for all students. Some suggestions for assisting English learners are provided in the teacher guide. However, there are no alternatives for the gifted and talented students, nor is there information for teachers on using the results of assessment to differentiate curriculum and instruction. There are no suggestions to teachers on how and when to modify assessments for special education students.

Instructional Planning and Support
The program does not provide different kinds of lessons or alternative ways in which to explain concepts. Therefore, teachers must either gather or develop supplementary material. There is no system provided for accelerating or decelerating the rate at which new material is introduced.

Special Consideration: Support for Teachers During the Transition Period
The program does not consistently provide specific ideas and supportive materials to address the needs of students who do not acquire mathematical knowledge easily.

Publisher: **Houghton Mifflin Company**
Title of Program: **Mathematics by Houghton Mifflin**
Grade Level: **K-5**

Components
Mathematics by Houghton Mifflin includes: student editions, teacher editions, Practice Masters/Workbooks, Reteach Masters/Workbooks with Refresher Lessons, Challenge Masters/Workbooks, Assessment Guides, Teacher Resource Books with Parent Letters, Computational Skills Tutorial Kits/CD-ROM in English and Spanish), Spiral Review Masters, English Language Learners Handbook, Math Background Books, Knowing Mathematics Transition Program, Manipulative Kits, Software, Education Place Internet Site.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
Overall, the program supports teaching the mathematics standards at each grade level. The program is particularly strong in several areas, such as providing written standards at the beginning of each student text and defining mathematical terms. There are examples and strategies for solving problems available for reference throughout the student editions. Support is given for skill practice outside the classroom.

Program Organization
Sequential organization of the mathematics program provides an excellent structure for what students should learn each year and allows teachers to convey the mathematics content efficiently and effectively.

Assessment
The program contains multiple measures to assess student progress. These measures reveal students' knowledge of and ability to apply mathematical concepts and skills.

Universal Access
The program provides access to the standards-based curriculum for grade-level students and English learners. However, it does not consistently provide the necessary depth and complexity for advanced learners. Teachers of special needs students are not provided with clear instruction in methods for differentiating curriculum that will lead to student success.

Instructional Planning and Support
The program contains numerous teacher support materials with suggestions and examples of how teachers can implement a standards-based mathematics program. Assistance is designed to help the teacher implement the program in a way that ensures the opportunity for most students to learn the essential skills and knowledge called for in the standards.

Special Consideration: Support for Teachers During the Transition Period
Overall, the program does not provide adequate support for teachers to develop appropriate instructional plans in the transitional period.

Publisher: **JRL Enterprises**
Title of Program: **I Can Learn Math**
Grade Level: **6**

Components
I Can Learn Math includes Computer Courseware, DVDs, Homework Books, Teacher Guide, and Classroom Explorer.

Summary
The State Board of Education rejected this program because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program fails to provide thorough instruction on the standards and the mathematics content described in the framework.

Program Organization
The program shows considerable flexibility in determining scope and sequence, pacing, and adjusting the level of difficulty. Student lessons are well organized and consistent, with initial statements of lesson objective(s), reviews, videos relating to real life situations, guided practice problems, student note-taking for definitions, and quizzes. However, few lessons develop conceptual understanding and problem solving on a daily basis. Student materials do not ensure that the students can look back for help with understanding a topic absent teacher intervention. While terms are defined in individual lessons, no glossary is provided.

Assessment
The program contains some strategies and tools for continually measuring student achievement with a reasonable degree of accuracy. However, no cumulative entry-level assessment is provided, nor are multiple methods of assessment provided (e.g., open-ended questions, verbal discussions, projects and portfolios.

Universal Access
The program does not provide access to the standards-based curriculum for all students with special needs. It does not consistently provide teachers with ideas and supportive materials to address the needs of special student populations.

Instructional Planning and Support
The program contains specific suggestions and illustrative examples of how the teacher can implement some standards-based mathematics lessons. The program presents clear, grade-appropriate explanations of some mathematical concepts, as well as some tools for assessing, and methods for accelerating or decelerating individual student progress. Teachers are given flexibility. However, guidance for classroom management is minimal.

Publisher: **JRL Enterprises**
Title of Program: **I Can Learn Algebra**
Grade Level: **8**

Components
I Can Learn Algebra includes the Computer Courseware, DVDs, Homework Books, Teacher Guide and Classroom Explorer.

Summary
The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program fails to provide thorough instruction in the standards and the mathematics content described in the framework.

Program Organization
In lessons that are aligned to the standards, the program is organized and presented in a manner consistent with achieving the goals of standards-based mathematics instruction. The program shows considerable flexibility in determining scope and sequence, pacing, and adjusting the level of difficulty. However, student materials do not ensure that the students can look back for help in understanding a topic without teacher intervention. While terms are defined in individual lessons, no glossary is provided.

Assessment
The program contains some strategies and tools for continually measuring student achievement with a reasonable degree of accuracy. However, there is no cumulative entry-level assessment, and multiple methods of assessment are not provided.

Universal Access
The program does not provide access to the standards-based curriculum for all students with special needs. Teachers are not consistently provided with ideas and supportive materials to address the needs of special student populations.

Instructional Planning and Support
The program contains specific suggestions and illustrative examples of how the teacher can implement some standards-based mathematics lessons. It presents clear, grade-appropriate explanations of some mathematical concepts, as well as some tools for assessing and methods for accelerating or decelerating the pace of instruction. Teachers are given flexibility in designing instruction. However, guidance for classroom management is minimal.

Publisher: **McDougal Littell, Inc.**
Title of Program: **Concepts & Skills**
Grade Level: **6-8**

Components
Concepts & Skills includes a student text, a teacher edition, a California Standards Key Concepts book, a teacher resource book for each chapter, A Practice Workbook, and various other workbooks and teacher resources (e.g., CD-ROMs with student tutorials, a test-and-practice generator, and other teacher tools). A Home and School Connection activity workbook (English/Spanish) is provided for grades 6&7/Course 1&2. Additional resources are provided for grade 8/Algebra 1, including an Algebra 1 refresher course for teachers. There is also a website for teachers, students, and parents (guardians).

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP) and the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program generally covers the content standards in keeping with the evaluation criteria, although there are weaknesses in the coverage of some standards. The California Standards Key Concepts book is needed to provide the depth of understanding of the content standards required by the framework.

Program Organization
The program, in general, is presented in a manner consistent with achieving the goals of the standards. It is strengthened by student help boxes which include study tips, homework help, and connections to review material that enable students to navigate the text for additional support. However, the organization of the text, the pervasiveness of extraneous material, and the quick movement to problem solving without development of concepts weakens the program.

Assessment
The program meets the assessment criteria. It includes many tools to measure student progress, including diagnostic tests with prescriptive evaluation.

Universal Access
The program was written with the current California student population in mind. Careful attention has been paid to the diverse needs and skill abilities of the students. The books scaffold and overlap concepts from year to year to provide access to all learners.

Instructional Planning and Support
The program contains a variety of materials that provide support for teachers. The teacher pages that begin each chapter include a pacing guide for regular and block scheduling as well as a list of support materials.

Other Comments
The publisher has agreed to release the copyright to the California Standards Key Concepts Book for duplication purposes and to make it available on CD-ROM. The publisher will adjust the Pacing Guides to reflect the differences in student progress.

Publisher: **McDougal Littell, Inc.**
Title of Program: **Structure & Method**
Grade Level: **6-8**

Components
Structure and Method includes at each grade level a student text, a teacher edition, a workbook on key concepts, various other workbooks as well as black line masters, transparencies, and software (including student tutorials and a test-and-practice generator on CD-ROM). In addition, the algebra (grade 8) component includes a review video.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program meets the criteria for mathematics content and alignment with standards. It is well organized, and topics are clearly and precisely explained. Mathematical problems provide ample practice with routine calculations and more involved multi-step procedures to foster the automatic use of these procedures and develop mathematical understanding. The program provides selected solved examples and strategies for solving various classes of problems. It is factually accurate; the terminology is precise. Mathematical reasoning is emphasized.

Program Organization
The program is sequentially organized. It allows teachers to convey the mathematics content efficiently and effectively. Concepts are developed in logical order and increase in depth from grade to grade. Computational and procedural skills, conceptual understanding, and problem solving are interconnected. The resources help teach prerequisite skills and reinforce topics.

Assessment
Instructional resources contain multiple measures to assess student progress throughout each program. These measures reveal student knowledge of concepts and skills and provide evidence of student progress towards the meeting of the Standards. Cumulative and summative assessments are provided throughout the series.

Universal Access
The program provides extra practice for students who need additional guidance or assistance. Enrichment and challenge problems are provided throughout the text and resource books. Lesson commentaries at the beginning of each chapter also provide guidance in assisting the teacher to adapt, plan, and manage the content of the lessons.

Instructional Planning and Support
The program includes extensive teacher support materials with specific suggestions and examples of how teachers can implement a standards-based mathematics program. Many instructional approaches are provided.

Other Comments
The program will require extra time for teachers to familiarize themselves with the use of all the materials.

Publisher: **McGraw-Hill School Division**
Title of Program: **McGraw-Hill Mathematics**
Grade Level: **K-6**

Components
McGraw-Hill Mathematics, in English and Spanish, includes Pupil Editions (consumable at K-2), Teacher's Guides, and Math Big Book Stories (K-2). It also includes an integrated transition program with workbooks and Teacher's Guides. Additional components include chapter file folders, assessment, practice, technology, and a Math at Home Parent's Guide.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program meets the evaluation criteria for mathematics content/alignment with standards sufficiently to be acceptable for adoption at all grade levels. It (1) contains sufficient explanations and examples, (2) defines and use mathematical terms appropriately, (3) brings appropriate closure to mathematical discussions, and (4) properly covers the key standards as set forth in the framework.

Program Organization
The program has a number of effective program organization components. Teachers need to be sure that new concepts are introduced at a reasonable pace in order to ensure that students receive sufficient instruction.

Assessment
Overall, the program's assessment component is one of its strengths. It has a full range of assessments that are correlated to the content standards and aid the teacher in instructional planning. The program also gives ideas for the teacher to modify instruction based on student performance.

Universal Access
The program provides access to the curriculum for students with special needs. Every chapter delineates strategies for reaching gifted and talented, English learners, early finishers, special education students, and other students who may need extra support.

Instructional Planning and Support
All materials are referenced in the teacher guide, which aids program management, although the sheer volume of ancillary booklets may prove cumbersome. Ideas for multi-age classrooms appear within each chapter overview, a feature that teachers will find this very useful. Teachers are not always supported in understanding the mathematics beyond the basics.

Special Consideration: Support for Teachers During the Transition Period
The transition program, *Bridge the Gap*, provides strategies and options for the teacher to meet the needs of those students not ready for the increased rigor of the California standards.

Publisher: **Prentice Hall, Inc.**
Title of Program: **Prentice Hall Pre-Algebra**
Grade Level: **7**

Components
Prentice Hall Pre-Algebra includes student and teacher editions, California Student Performance Pack, California Teaching Resources, Solution Key, Teaching Transparencies, Student Edition Answers on Transparencies, Daily Skills Warm-up Transparencies, Algebra Readiness Kit, California Assessment Success Kit, Interactive Math: Lessons and Tools CD-ROM, Video Field Trips: Algebra and Geometry Applications, Pre-Algebra Instructional Videos, and Prentice Hall California Skills Intervention Kit.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program addresses the standards in keeping with the evaluation criteria. Mathematical terms are defined and used appropriately. Mathematics vocabulary is highlighted throughout the student text. Ample practice is provided in the student edition. Regular opportunities for students to demonstrate mathematical reasoning are embedded throughout the program.

Program Organization
The program is organized and presented in a manner consistent with achieving the goals of standards-based mathematics instruction. Students, parents (guardians), and tutors can look to the student textbook for help. The teacher edition is clearly and consistently organized.

Assessment
The program contains strategies and tools for continually measuring student achievement. The instructional resources contain multiple measures to assess student progress.

Universal Access
The program provides access to the standards-based curriculum for special needs students, including help for students who are below grade level, with more explicit explanations, review, practice, guidance and other assistance. It consistently provides the teacher with ideas and supportive materials to address special student populations.

Instructional Planning and Support
All components of the program are provided so that there is little or no need for teachers to identify, gather or develop supplementary materials. Guidance and suggestions for the teacher are evidenced throughout the teacher edition

Special Consideration: Support for Teachers During the Transition Period
The program includes materials to help the student transition to the level of the standards for this grade level, while supporting the teacher in providing appropriate instruction.

Publisher: **Prentice Hall, Inc.**
Title of Program: **Prentice Hall Algebra 1**
Grade Level: **8**

Components
Prentice Hall Algebra I includes the California student and teacher textbook editions, Teaching Transparencies, teaching resources for lessons/chapters, which include enrichment worksheets, chapter exams, quizzes, and English/Spanish worksheets. A variety of assessments and a Skills Intervention Kit (including workbooks and practice tests) are provided. Technology components include a student tutorial CD-ROM, the Resource Pro® CD-ROM with a test bank, a skills intervention CD-ROM, and a website for California teachers, students, and parents (guardians).

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program meets the criteria for mathematics content/alignment with the standards. The use of terms and mathematical content are scholarly and accurate. Both the student and teacher texts are written in clear language, making them easy to understand and use effectively. The entire program thoroughly supports teaching and learning the skills and knowledge set forth in the content standards.

Program Organization
The program substantially meets the criteria for program organization The teacher is given clear guidance to support standards-based instruction. Explanatory materials and clear directions are provided for students. Help is also there for students to look back in the textbook for review.

Assessment
The program meets the criteria for assessment. Teachers are provided materials for both pre- and post-assessment with many options integrated throughout. The student textbook provides exercises that make it possible for the students to monitor their own progress. Students also acquire test-taking strategies to attain success.

Universal Access
The program meets the criteria for universal access for all students. Suggestions for helping students with special needs are provided for teachers.

Instructional Planning and Support
The program meets the criteria for instructional planning and support. It provides readily-accessible support for the teacher. Specific suggestions and illustrative examples of how to implement a standards-based mathematics program are clearly outlined in each chapter.

Special Consideration: Support for Teachers During the Transition Period
A notable feature of this program is its extensive and thorough support for teachers and students during this transition period.

Publisher: **Riverdeep, Inc.**
Title of Program: ***Destination Math***
Grade Level: **7**

Components
Destination Math is a computer-based program organized by conceptual ideas in four major courses in which there are 19 instructional modules. The Master Pack of CDs, includes Mastering Skills & Concepts for Basic Math IV, Mastering Skills & Concepts for Pre-Algebra V, Mastering Algebra Course 1 Mastering Algebra Course 2, Tangible Math Disk, and Installation Disk. The printed materials include the users manual, student print materials, and overview packet.

Summary
The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received.

Mathematics Content/Alignment with Standards
The program does not sufficiently address the content standards and evaluation criteria. The standards are not correlated within the computer program. It is difficult to connect the standards to the program's content.

Program Organization
The program does not adequately address the program organization criteria. Instructions for using the program are often difficult or confusing, requiring intensive in-service training.

Assessment
The program inadequately addresses the assessment criteria. A student does not have to demonstrate understanding, merely completion, to progress through the program. There is no evidence of cumulative assessment or of reporting progress to parents (guardians).

Universal Access
The program does not sufficiently address universal access criteria. A strength of the program is technology that allows for self-pacing and for students working at their own level. However, students not progressing in the content are limited to revisiting the same material. No reteaching strategies are given.

Instructional Planning and Support
The program rarely addresses instructional planning and support criteria. Support for the teacher to use the program in a typical classroom or in a lab setting is inadequate. Information on alternative presentations is limited. Classroom organization, management of student learning, and communication with parents are also limited.

Publisher: **William H. Sadlier, Inc.**
Title of Program: **Progress in Mathematics**
Grade Level: **K-6**

Components
Progress in Mathematics contains student texts, teacher editions, workbooks, teacher editions of workbooks, skills update practice books, teacher editions of skills update practice books, student test booklets, test answer booklets, family connections in English and Spanish, internet components for student, family and teacher, teacher manipulative resources and student manipulative kits. In addition, the program has a pupil progress and teacher management system. It also includes an intervention component with student and teacher edition.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program's overall content supports the teaching and learning of the mathematics standards at each grade level. Concepts and procedures are well explained and are accompanied with examples to reinforce the lesson throughout all the grade levels. The program is exemplary in its presentation of regular opportunities for students to demonstrate mathematical reasoning. Students are challenged to explain how and why critical thinking occurred.

Program Organization
The program content is well organized and developed. It is presented in a manner consistent with achieving the goals of the standards. The sequence and organization of the program conveys the mathematics content efficiently and effectively.

Assessment
The program provides a multitude of assessments, including (in each chapter at all grade levels) a diagnostic indicator with a complete item analysis, a performance assessment, and a post-test. Each chapter has a test in standardized format. The assessments for special needs students do not reflect the way that they are taught.

Universal Access
At the beginning of the chapter in each grade level, the program provides the teacher with universal access ideas for English learners, special education students, and advanced learners.

Instructional Planning and Support
Instructional planning and support is another of the program's strengths. Lessons are well thought out and organized, including detailed lesson plans, background information, and ample practice to meet objectives. At the end of every lesson, students are given a chance to summarize what they have learned that day.

Special Consideration: Support for Teachers During the Transition Period
The program includes a fully integrated supplement for transitioning students in grades 4-6, including lesson plans and alternative teaching suggestions for teaching at-risk students. Correlations to the main program include the targeting the prerequisite skills for each chapter.

Publisher: **Saxon Publishers, Inc.**
Title of Program: **Saxon Math K-3, An Incremental Development**
Grade Level: **K-3**

Components

This program consists of teacher manuals (one manual for kindergarten, three manuals for grades 1-3 including assessment), consumable student materials for grades 1-3 (option of 24 or 32 student sheets per lesson), non-consumable kindergarten ready-made student materials (all student materials necessary for a class of thirty-two students) or reproducible masters (included in teacher manual), Supplemental Practice for kindergarten, manipulatives specific to each grade level, and alternative formats for Spanish for each grade.

Summary

The State Board of Education adopted this program in keeping with the recommendations of the content Review Panel (CRP) and the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards

The program meets the criteria for mathematics content/alignment with standards sufficiently to be acceptable for adoption. It does a remarkable job with data, asking students to interpret and create visual displays relative to their daily lives. Patterns are also a strength of the program, as are the areas of rote counting, time, calendar, temperature, and counting money.

Program Organization

The program is tightly structured, providing continuity between classrooms, across grade levels, and among schools in districts. The daily instruction is organized for the success of the new teacher. The scripted structure offers a consistent, predictable method of presenting material

Assessment

The program meets the evaluation criteria for assessment sufficiently to be acceptable for adoption. Assessment tools include: observations, oral interviews (every ten lessons), written assessments (every five lessons), and two recording forms. The program would have been strengthened with the inclusion of more suggestions on how to use the assessment information to differentiate instruction and for remediation.

Universal Access

The program meets the evaluation criteria for universal access sufficiently to be acceptable for adoption. In the lower grades, the program calls for heterogeneous grouping, because the gap between students who learn slowly and quickly is relatively small.

Instructional Planning and Support

The program provides specific complete information for the teacher to prepare and present each lesson. While the scripted structure does not provide for different kinds of lessons, alternate ways in which to explain concepts offer teachers some choices and flexibility in developing programs. The scripted structure has unique strengths.

Publisher: **Saxon Publishers, Inc.**
Title of Program: **Math 54, 65, 76, and 87**
Grade Level: **3-6**

Components
This program consists of a student text, teacher edition, test masters, test generator CD, California Teacher Resource Binder (CTRB) for each grade level, and alternative formats for Spanish for each grade. Adaptations for Special Populations Teacher Resource Kit for each grade level (this includes teacher edition, posters, reproducible masters and an instructional video for use with students with special needs), manipulatives, and workbooks.

Summary
The State Board of Education adopted this program in keeping with the recommendations of the Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards
The program meets the evaluation criteria for mathematics content/alignment with standards sufficiently to be acceptable for adoption. The program places a particularly high level of emphasis on the Number Sense strand. The incremental practice provided for students is likely to produce a high level of automaticity.

Program Organization
The program meets the evaluation criteria for program organization sufficiently to be acceptable for adoption. A particular organizational strength of the program is the referencing back in the practice sets to the places in the text where concepts or skills are taught.

Assessment
The program meets the evaluation criteria for assessment sufficiently to be acceptable for adoption. A strength of the program is that regular assessments are provided at appropriate intervals to monitor student progress.

Universal Access
The program meets the evaluation criteria for universal access sufficiently to be acceptable for adoption. Universal access strategies for special education students are provided. The publisher suggests that higher achieving students work independently in the next year's text. The program is offered in Spanish, which helps meet the needs of English learners. Other universal access strategies are also offered.

Instructional Planning and Support
The program meets the evaluation criteria for instructional planning and support sufficiently to be acceptable for adoption. The program's "scripting" of lessons is regarded as a strength by some and a weakness by others. While the scripts are a definite assist for "math-phobic" teachers, it is important that all teachers ensure that students receive complete instruction in the mathematics standards.

Publisher: **Saxon Publishers, Inc.**
Title of Program: **Algebra ½ & Algebra 1**
Grade Levels: **7-8**

Components
Algebra ½ & Algebra I consist of student texts, teacher editions, test masters, and solutions manuals.

Summary
The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematical Content/Alignment to the Standards
The program does not cover the content standards for grade 7 and for algebra sufficiently to be acceptable for adoption.

Program Organization
The program is not organized and presented in a manner consistent with achieving the goals of standards-based mathematics instruction. It provides review in the form of problem repetition in daily exercises. However, practice for a new lesson is diluted by the sometimes-extensive review of skills from much earlier lessons. There is no overview of chapters or lessons, informing parents, students, or teachers what the students are expected to learn. The program's California Addendum provides minimal instructional information for the teacher.

Assessment
The program contains some strategies and tools for continually measuring student achievement with a reasonable degree of accuracy. No entry-level assessment exists to measure mastery of pre-requisite skills and standards. Multiple methods of assessment are not explicit. Suggestions are provided for flexibility in grading; however, there are no suggestions (based on assessment data) about ways to modify the instructional program and practices or to inform students and parents (guardians) about student progress.

Universal Access
The program does not provide access to the standards-based curriculum for students with special needs. It does not consistently provide teachers with ideas and supportive materials to address the needs of special student populations.

Instructional Planning and Support
The program contains few specific suggestions and illustrative examples of how the teacher can implement a standard-based mathematics program. Inadequate assistance is provided to help the teacher implement the program in a way that ensures all students will learn the essential skills. The program provides minimal recommendations to teachers regarding instructional approaches. There are few, if any, alternative ways to explain concepts or techniques that would provide teachers choice and flexibility according to their classroom needs.

Publisher: **Scott Foresman**
Title of Program: **Scott Foresman - California Mathematics**
Grade Level: **K-6**

Components

Scott Foresman - California Mathematics includes student texts, corresponding teacher editions, and intervention materials. Additional support materials included are workbooks, black line masters, transparencies, manipulative kits, flip charts, calendar kits, big books (K-2), technology, assessment, home-school connection, and universal access materials. Spanish materials are also available.

Summary

The State Board of Education adopted this program in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards

Overall, the program supports teaching and learning consistent with the content standards. Ample practice is provided with both routine calculations and more involved multi-step procedures. Materials are written for individual study, classroom instruction, and practice outside the classroom. Closure is easily identified in the teacher editions. Most topics cover broad levels of difficulty, and some move beyond a minimal level of competency.

Program Organization

The sequence and organization of this program provide structure to what students should learn each year and allow the teacher to convey the mathematics content. Computational and procedural skills, conceptual understanding, and problem solving are interconnected and included throughout the program.

Assessment

The instructional materials contain multiple strategies and tools for continually measuring student achievement with a reasonable degree of accuracy. Various assessments measure what students know and how well they know it. Many opportunities to assess student progress include elements of conceptual understanding, basic and procedural skills, and problem solving.

Universal Access

The program provides access to the standards-based curriculum for students with special needs. Strategies are supplied to help the teacher provide access to mathematics for all students. Teachers are provided with activities at the beginning of each chapter to support English learners, special education students, students at risk of failing, and advanced learners.

Instructional Planning and Support

The program provides specific suggestions and illustrative examples for implementing a standards-based mathematics program. Teacher materials contain sample lesson plans. Individual components, which are not linked, are included for accelerating or decelerating the rate at which material is introduced to students, however, a coordinated system is not provided. Instructional software is included but not necessarily an integral part of the program.

Publisher: **Wasatch Interactive Learning**
Title of Program: **Math Expeditions**
Grade Level: **K-5**

Components

Math Expeditions includes computer software, student worksheets, and a teacher guide. The "expeditions" are: Level A, Pacific Coast Tide Pool; Level B, Buffalo National River; Level C, Rocky Mountains; Level D, Puffin Island; Level E, Red Rock Country; Level F, Cumberland Island National Seashore; Level G, Everglades; Level H, Arkansas National Wildlife Refuge; and Level I, Philadelphia Archeology Expedition.

Summary

The State Board of Education rejected this program, because the State Board found that the submission did not adequately meet the criteria for adoption, taking into account the totality of the information received. The State Board's action was in keeping with the recommendations of the Instructional Materials Advisory Panel (IMAP), Content Review Panel (CRP), and Curriculum Development and Supplemental Materials Commission (Curriculum Commission).

Mathematics Content/Alignment with Standards

The program does not cover the content standards at each grade level. Therefore, supplemental materials would be required for students to master grade-level content.

Program Organization

Most concepts are developed in a logical order, starting with easy cases and proceeding to more complex problems. However, student materials are inadequate, and no textbook is provided to ensure that students can look back in the program outside of the classroom. Although the program includes definitions for new words, there is no glossary. The materials do not help teachers identify the reason for student mistakes, nor suggest specific remedies. The program focuses on computational and procedural skills; mathematical reasoning is limited.

Assessment

By its nature, this computer-based program measures individual student progress at regular intervals. However, the program does not provide opportunities to assess student reasoning. There is no initial comprehensive assessment to determine entry-level placement. The program lacks a variety of assessments to help teachers plan and modifying instruction.

Universal Access

Due to the sequence of the lessons, there are opportunities for review and practice for students who are below grade level. There is no guidance for teachers to place students in appropriate levels. There are no suggestions for compacting or expanding the curriculum and grouping within or across grade levels. Advanced learners can progress to higher grade levels, but cannot expand in-depth knowledge and mathematical reasoning within their grade levels.

Instructional Planning and Support

The program does not provide teacher resources for discussion of the grade level content. There is no system provided for accelerating or decelerating the rate at which new material is introduced. The materials do not contain suggestions for organizing and managing the classroom. Tools for assessing student progress and knowledge provide no suggestions as to how the teacher can use the data for instructional planning other than repeating lessons.